

**POSITION DESCRIPTION  
COVER SHEET**

REASON FOR THIS POSITION		
1. NEW <input checked="" type="checkbox"/>	2. IDENTICAL ADDITION TO THE ESTABLISHED PD NUMBER <input type="checkbox"/> NHQENG81089009	3. REPLACES PD NUMBER

RECOMMENDED				
4. TITLE <b>Civil Engineer, Agricultural Engineer</b>		5. PAY PLAN <b>GS</b>	6. SERIES <b>810/890</b>	7. GRADE <b>09</b>
8. WORKING TITLE (Optional) <b>Civil Engineer, Agricultural Engineer</b>			9. INCUMBENT (Optional)	

OFFICIAL						
10. TITLE <b>Civil Engineer, Agricultural Engineer</b>						
11. PP <b>GS</b>	12. SERIES <b>810/890</b>	13. FUNC <b>51</b>	14. GRADE <b>09</b>	15. DATE Month Day Year		16. I/A <input type="checkbox"/> Yes <input type="checkbox"/> No
						17. CLASSIFIER

8. ORGANIZATIONAL STRUCTURE (Agency/Bureau)			
1st	<b>Natural Resources Conservation Service</b>		5th
2nd			6th
3rd			7th
4th			8th

SUPERVISOR'S CERTIFICATION			
I certify that this is an accurate statement of the major duties and responsibilities of the position and its organizational relationships and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds and that false or misleading statements may constitute violations of such statute or their implementing regulations.			
19. SUPERVISOR'S SIGNATURE		20. DATE	22. SECOND LEVEL SUPERVISOR'S SIGNATURE
21. SUPERVISOR'S NAME AND TITLE		23. DATE	
		24. SECOND LEVEL SUPERVISOR'S NAME AND TITLE	

FACTOR EVALUATION SYSTEM					
FACTOR	25. FLD/BMK	26. POINTS	FACTOR	25. FLD/BMK	26. POINTS
1. Knowledge Required	<b>FL 1-6</b>	<b>950</b>	6. Personal Contacts	<b>FL 6-2</b>	
2. Supervisory Controls	<b>FL 2-3</b>	<b>275</b>	7. Purpose of Contacts	<b>FL 7- B</b>	<b>75</b>
3. Guidelines	<b>FL 3-3</b>	<b>275</b>	8. Physical Demands	<b>FL 8-2</b>	<b>20</b>
4. Complexity	<b>FL 4-3</b>	<b>150</b>	9. Work Environment	<b>FL 9-2</b>	<b>20</b>
5. Scope and Effect	<b>FL 5-3</b>	<b>150</b>	<b>TOTAL POINTS</b>		<b>1915</b>
<b>GRADE</b>					<b>GS-09</b>

CLASSIFICATION CERTIFICATION	
I certify that this position has been classified as required by Title 5, US Code, in conformance with standards published by the OPM or, if no published standard applies directly, consistently with the most applicable published standards.	
29. SIGNATURE 	30. DATE <b>10/23/09</b>

31. NAME AND TITLE <b>Darlene Locke, Human Resources Specialist, Employment and Classification Team, Washington, D.C.</b>	
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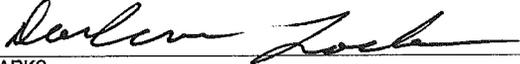
32. REMARKS:	33. OPM CERTIFICATION NUMBER
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**Reference:** OPM JFS PROFESSIONAL WORK ENGINEERING & ARCHITECTURE GROUP, NOV 2008  
**FLSA – Non-Exempt.**

**MASTER RECORD/INDIVIDUAL POSITION DATA**  
THIS SIDE TO BE COMPLETED BY THE CLASSIFIER

<b>A. KEY DATA</b>					
1. FUNCTION (1)	2. DEPT CD. /AGCY-BUR-CD. (4)	3. SON (4)	4. MR. NO. (6)	5. GRADE (2)	6. IP NO. (8)
	<b>AG 16</b>				

<b>B. MASTER RECORD</b>					
1. PAY PLAN (2)	2. OCC. SERIES (4)	3. OCC. FUNC. CD. (2)	4. OFF. TITLE CD. (5)	5. OFFICIAL TITLE (38)	
<b>GS</b>		<b>51</b>			
6. HQ. FLD. CD. (1)	7. SUP. CD. (1)	8. CLASS STD. CD. (1)		9. INTERDIS. CD. (1)	10. DT CLASS (6)
1 = HQ 2 = FLD	1 = Sup. SGEG 3 = Mgr. SGEG 4 = Sup. CSRA	5 = Mgmt. CSRA 6 = Leader LGEG 8 = All Others	X = New Standard Applied Blank = NA	N = No Y = Interdis	MO DAY YEAR
11. EARLY RET. CD. (1)	12. INACT/ACT (1)	13. DT. ABOL. (6)	14. DT. INACT/REACT (6)	15. AGENCY USE (10)	
1 = Primary 2 = Secondary	3 = Foreign Svc. Blank = NA	I = Inactive A = Active	MO DAY YEAR	MO DAY YEAR	
16. INTERDISCIPLINARY SERIES (40) (4) Per Block					
17. INTERDISCIPLINARY TITLE CODE (50) (5) Per Block					

<b>C. INDIVIDUAL POSITION</b>										
1. FLSA CD. (1)	2. FIN. DIS. REQ. (1)	3. POS. SCHED. (1)	4. POS. SENS. (1)	5. COMP. LEV. (4)						
E = Exempt N = Nonexempt	0 = None 1 = CD 219 2 = CD 220	3 = SF 278 4 = AD 392 5 = SF 849	A = Sched A B = Sched B C = Sched C	0 = Excepted but not A,B,C	0 = Nonsensitive 1 = Noncritical 2 = Critical Sense					
6. WK. TITLE CODE (4)										
7. WK. TITLE (38)										
8. ORG. STR. CODE (18)			9. VAC REV CODE (1)							
1st	2nd	3rd	4th	5th	6th	7th	8th	0 = Position Action No Vacancy A = No Change	B = Lower Grade C = Higher Grade	D = Different title and/or series E = New Position/New FTE
10. TARGET GD.	11. LANG. REQ. (2)	12. PROJ. DTY. IND. (1)	13. DUTY STATION (9)			14. BUS. CD. (4)	15. DT. LST. AUDIT (6)	16. PAS. IND. (1)	17. DATE EST.	
		Blank = NA Y = Yes	State (2)	City (4)	County (3)	MO DAY YEAR	MO DAY YEAR	Blank=NA 1 = PAS	MO DAY YEAR	
18. GD. BASIS. IND (1)			7 = Equipment Devel. Guide 8 = Agency Use 9 = Agency Use ALPHAS = Agency Use			19. DT.REQ. REC. (6)	20. NTE. DT. (6)	21. POS.ST. BUD (1)		
1 = Rev. when vacant 2 = Impact of Person 3 = Sup./SGEG	4 = Sup./Program 5 = RGEN 6 = Policy Analysis G E G					MO DAY YEAR	MO DAY YEAR		Y = Perm N = Other	
22. MAIN. REV./CLASS.ACT. CD. (2) (1st Digit = Activity and 2nd Digit = Results)										
Normal Act		Maintenance Review Act		Results						
1 = Desk Audit 2 = Sup. Audit 3 = Paper Rev. 4 = PME/Activity Rev.	5 = Desk Audit 6 = Sup. Audit 7 = Paper Rev. 8 = Panel Rev.	1 = No Action Req. 2 = Minor PD Change 3 = New PD Req. 4 = Title Change	5 = Series Change 6 = Pos. Upgrade 7 = Pos. Downgrade 8 = New Pos.	9 = Other						
23. DATE EMP. ASGN. (6)	24. DATE ABOL. (6)	25. INACT/ACT(1)	26. DATE INACT/REACT (6)	27. ACCTG. STAT. (4)	28. INT. ASGN. SER. (4)	29. AGENCY USE (8)				
MO DAY YEAR	MO DAY YEAR	I = Inact. A = Act.	MO DAY YEAR							
30. CLASSIFIER'S SIGNATURE						31. DATE				
						<b>10/23/09</b>				
32. REMARKS										
This is an interdisciplinary position. The titles, and series identified are appropriate, depending on the qualifications of the incumbent.										

## STANDARD POSITION DESCRIPTION

**This is an interdisciplinary position. The titles, and series identified are appropriate, depending on the qualifications of the incumbent.**

**Official Title:** Civil Engineer/Agricultural Engineer  
**Working Title:** Civil Engineer/Agricultural Engineer  
**Classification:** GS-810/GS-890 - 09  
**Location:** Field Level

**Date:** May 12, 2009  
**Classified by:** NHQ-HRMD  
**Number:** NHQENG81089009  
**Supervisory Code:** 8

**NOTE:** This is a standard position description and cannot be modified without the approval from the Human Resources Management Division, Employment & Classification Team, Washington, D.C.

### **INTRODUCTION**

- a. This is an engineering position located at the field level. The incumbent serves as a field or staff engineer and is responsible for providing basic technical guidance and in the overall planning, design, installation, and maintenance of the engineering phases of soil and water conservation practices.
- b. Responsible for providing and maintaining a safe and healthy work environment, and to use safety precautions when exposed to dangerous objects, chemicals, extreme temperatures, etc.

### **DUTIES AND RESPONSIBILITIES**

#### **1. Engineering Practice Design (60%)**

- a. Assists higher graded engineers or field personnel in the planning, design and construction of engineering practices such as water management, animal waste management, erosion control, flood control, wetland creation or restoration, and other conservation practices needing engineering guidance.
- b. Interprets plans and specifications for contractors, solving problems at local level as to proper interpretation of specifications. Assist in the calculations of earthwork, concrete, steel, conduits, and other materials, and prepares construction estimates and bills of materials.
- c. Provides engineering assistance and direction to the assigned area and helps provide engineering continuity and coordination across areas.

#### **2. Quality Assurance (30%)**

- a. Makes site investigations and field checks designs as prepared/approved by the State Conservation Engineer (SCE) of structural works of improvement prior to contracting; prepares or reviews field designs and preliminary and final drawings and specifications on agricultural engineering practices for review by higher level engineer. Designs are checked for ease of construction, availability of materials and whether or not structures are adapted to the specific site.

- b. Recommends changes in designs, specifications, and schedules to accommodate conditions at construction site, availability of materials or to expedite construction. Makes hydrological determinations and solves hydraulic problems including flood routing.
- c. Coordinates and conducts necessary quality assurance reviews of planned, designed, and constructed engineering projects in the assigned area. Works within a team concept to develop and implement ways to improve the efficiency, effectiveness, and quality of the products and/or services provided to internal and external customers.
- d. Provides technical guidance and training to personnel on basic engineering practices and in the use and care of engineering equipment.

**4. Civil Rights**

Performs duties in a manner which actively supports civil rights policies regarding personnel rules and regulations and delivery of NRCS programs and services without regard to race, color, national origin, religion, sex, age, marital status, or mental or physical handicap.

**Performs other duties as assigned.**

**CONDITION OF EMPLOYMENT** - Operates a motor vehicle incident to the above duties. Must possess and maintain a valid state motor vehicle operator’s license for the type of vehicle(s) operated. This will require the operation of a motor vehicle on both public and private roads during daylight hours and occasionally after dark.

**EVALUATION FACTORS**

**1. KNOWLEDGE REQUIRED BY THE POSITION - LEVEL 1-6 (950 POINTS)**

- a. Knowledge of hydraulics, hydrology, structural design, soil mechanics, water management, agricultural waste, stream restoration, and engineering geology.
- b. Ability to effectively and efficiently utilize engineering design and CAD software in order to conduct evaluations, developing construction drawings and construction specifications. Skill in spreadsheet databases and use is required.
- c. Knowledge and ability to plan, design, and assist in the installation of projects from simple on-farm projects to basic watershed projects.
- d. Knowledge of federal and state laws governing applied engineering practices for projects.

**2. SUPERVISORY CONTROLS – LEVEL 2-3 (275 POINTS)**

The supervisor is the lead engineer (Area/Zone Engineer) and makes assignments by defining objectives, priorities, and deadlines and assists the employee with unusual situations that do not have clear precedents. The employee plans and carries out the successive steps and handles problems and deviations in the work assignments in accordance with instructions, policies, previous training, or accepted practices in the occupation. Completed work is evaluated for

technical soundness, appropriateness, and conformity to policy and requirements. The methods used in arriving at the end results are not reviewed in detail.

### **3. GUIDELINES – LEVEL 3-3 (275 POINTS)**

Guidelines include engineering manuals, agency regulations, applicable codes, manufacturers' catalogs, publications of professional societies, and higher headquarters policy and program directives. The incumbent uses judgment in applying various engineering designs and specifications to specific jobs. Where necessary, the incumbent makes recommendations for changing criteria or policy to fit specific situations.

### **4. COMPLEXITY – LEVEL 4-3 (150 POINTS)**

a. The incumbent has some latitude for action and decision and is required to assist a higher level engineer in the overall technical responsibility for the more difficult type of conservation practices. Assist in acquiring public health and safety regulations permits for storm water runoff, construction of larger dams, well construction and plugging, and construction of animal waste management systems.

b. Topography is varied with areas of cropland and pastureland and some urban-built-up land making up the land use. The incumbent is expected to provide assistance to contractors in construction operations such as earthwork excavation and fill placement, dewatering, erecting structures.

### **5. SCOPE AND EFFECT – LEVEL 5-3 (150 POINTS)**

The engineer provides assistance on basic field office engineering projects. The work involves engineering projects prepared in the state are developed for individual landowners, groups, units of government, and other agencies. The incumbent must assimilate information, develop sound conclusions and make appropriate recommendations, keeping with NRCS objectives and the needs of other groups and agencies. The Engineer assists field personnel in carrying out a sound engineering program and in providing training to other staff, agencies, organization and contractors.

### **6. & 7 PERSONAL AND PURPOSE OF CONTACTS – LEVEL 2B (75 POINTS)**

a. Personal Contacts – Contacts are both within and outside the agency. Contacts within the agency are often at different organizational levels. Contacts within the agency may be with people at various levels, such as headquarters or field offices that include contractors, landowners, state and local government representatives, and other agencies.

b. Purpose of Contacts – Contacts are made to plan coordinate, and inform people with mutual goals to agree on solutions to problems and the proper course of action. The incumbent typically identifies options for resolving problems by emphasizing technical reasons and gains to be accomplished through use of specific actions.

### **8. PHYSICAL DEMANDS – LEVEL 8-2- (20 POINTS)**

The work requires some physical exertion such as long periods of standing, traversing steep slopes and rough construction sites, recurring bending and stooping, jumping across shallow ditches, walking in soft, muddy and slippery conditions, and lifting and carrying equipment and samples that weigh up to 50 pounds.

**9. WORK ENVIRONMENT – LEVEL 9-2 (20 POINTS)**

Work is typically performed in an office setting. Frequent trips to field sites involve exposure to construction equipment and the environment, and extreme temperatures of hot and cold. Exposure to noise levels common to construction sites with large earthmoving equipment can be expected. There will be exposure to disease carrying insects and irritating plants.

**This position is determined to be non-exempt from the provisions of FLSA, CFR 551.204.**

**Total Points = 1915**

**Range GS-09 = 1855-2100**

## **EVALUATION STATEMENT**

### **AGRICULTURAL/CIVIL ENGINEER (FIELD ENGINEER) GS-0890/810-09 USDA – NRCS**

#### **INTRODUCTION**

This position is located in a field office with the USDA - Natural Resources Conservation Service in a designated state. The incumbent serves as area/zone engineer and is responsible for providing technical guidance and leadership in the overall planning, design, installation, and maintenance of the engineering phases of soil and water conservation practices as well as watershed flood protection programs

#### **SERIES AND TITLE DETERMINATION:**

Responsible for performing and/or directing the full range of field engineering functions associated with assigned technical engineering projects. Prepares field designs and sketches with written descriptions of work for construction contract modifications. Communicates with contractors and field offices regarding all aspects of technical engineering relating to overall planning, design, installation, and maintenance of the engineering phases of soil and water conservation practices as well as watershed flood protection programs. The scope of work and responsibilities assigned clearly match the requirements for a professional engineer. Since these functions can be performed by individuals within the Civil- GS-810, or Agricultural GS-890 Engineering disciplines, the Interdisciplinary, GS-800 title is appropriate.

**Title, Series, and Grade:** Civil Engineer, GS-810-09 or Agricultural Engineer, GS-890, 09

<b>POSITION EVALUATION SUMMARY</b>				
<b>Evaluation Factors</b>		<b>Factor Level Used (FL#, etc.)</b>	<b>Points Assigned</b>	<b>Comments</b>
1. Knowledge Required by the Position		1-6	950	
2. Supervisory Controls		2-3	275	
3. Guidelines		3-3	275	
4. Complexity		4-3	150	
5. Scope and Effect		5-3	150	
6. & 7. Personal Contacts & Purpose of Contacts		2B	75	
8. Physical Demands		8-2	20	
9. Work Environment		9-2	20	
			1915	<b>Classified by:</b> Darlene Locke, Human Resources Specialist, HRMD
<b>SUMMARY</b>	<b>Total Points</b>			
	<b>Grade Conversion</b>	1855–2100	GS-09	<b>Date:</b> May 25, 2009

Additional Remarks:

**GRADE LEVEL DETERMINATION:** The GS-0800 Engineering Professional standard refers the classifier to the, OPM JFS PROFESSIONAL WORK ENGINEERING & ARCHITECTURE GROUP, NOV 2008 for guidance related to grade level determination. This guide uses a factor evaluation process to determine the appropriate grade for positions using this Job Family Standard; therefore, a factor-by-factor analysis is used to determine the proper grade for this position.

**FLSA DETERMINATION:** This position does not meet the Professional Exemption Criteria as defined in 5 CFR 551.204 and is considered Non-Exempt by FLSA Standards.